What are countermeasures?
Countermeasures are interventions taken to help prevent or slow the spread of disease. An important way the Centers for Disease Control and Prevention (CDC) helps keep our nation safe when public health emergencies (i.e., an influenza pandemic, natural disaster, or national security emergency) occur is by distributing and tracking the use of medicine and supplies used to address the health threat. Such medicine and supplies are commonly called medical countermeasures.

What are CDC Countermeasure Tracking Systems?
A critical factor for rapid, effective response to a health emergency is that public health decision makers have timely, accurate information about their countermeasure supply, distribution, and use. This key information, gathered from local to national levels, guides them to know when and where to deploy countermeasures for the most effective results.

To ensure this vital countermeasure information is available to public health officials, CDC created the Countermeasure Tracking Systems (CTS) program. The program is composed of three Web-based computer applications that can be used separately or in combination, depending on the situation. The CTS applications are:

- Countermeasure and Response Administration (CRA),
- Inventory Management and Tracking System (IMATS), and
- Countermeasure Inventory Tracking (CIT) Dashboard.

The applications each use CDC's secure data-access method, and they are available to public health departments for free. The applications are easy to use and require minimal training. Via a standardized information exchange, CDC can also use CTS applications to access relevant emergency-response public health data held in information systems used by state and local partners.

Countermeasure and Response Administration
CRA is an emergency response system that CDC and state public health departments use to track administration of vaccine doses and amount of pharmaceuticals and medical materials dispensed. This flexible system reduces the need to develop new such tracking applications for each new emergency event. Analysis of CRA data can contribute to ensuring the effective distribution and use of countermeasures. For more information, e-mail CTSHelp@cdc.gov or visit http://www.cdc.gov/cts/cra/.

Inventory Management and Tracking System
Use of IMATS helps CDC, state, and local public health departments manage medical countermeasure inventories, whether during emergency response operations or during the course of routine business activities. This versatile system is used to track inventory levels; monitor reorder thresholds; and to increase the efficiency of emergency and routine warehouse operations such as receiving, staging, and storing medical countermeasures. For more information, e-mail CTSHelp@cdc.gov or visit http://www.cdc.gov/cts/imats/.

Countermeasure Inventory Tracking Dashboard
The CIT Dashboard streamlines communication among CDC officials, state public health authorities, and commercial pharmaceutical suppliers so that all are aware of both the pharmaceutical inventories on hand and those available to meet potential resupply demands. For more information, e-mail CTSHelp@cdc.gov or visit http://www.cdc.gov/cts/cit/.

How are Countermeasure Tracking Systems used?
The use of these unique applications enables CDC and state and local public health departments to manage countermeasure inventories at multiple locations, track the dispensing and use of countermeasures, and to monitor resupply capacity from private-sector vendors. Consolidated data gained from these applications can reveal to health officials a range of important information such as population immunization coverage, numbers of treated persons, medicine and equipment inventories, and resupply needs.

The CTS program proved its value as an important emergency response asset in 2009 during CDC’s H1N1 (swine flu) Vaccination Campaign. CTS applications were used to assess countermeasure availability, track vaccine dispensing, and determine the extent of vaccination coverage for at risk populations. For more information, e-mail CTSHelp@cdc.gov or visit http://www.cdc.gov/cts/.